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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/665,605	09/16/2003	Robert T. Bigelow	BA-U-SIM-00010	6384

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EXAMINER

SAADAT, CAMERON

ART UNIT	PAPER NUMBER
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3715

DATE MAILED: 05/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/665,605	Applicant(s) BIGELOW, ROBERT T.	
	Examiner Cameron Saadat	Art Unit 3715	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>9/16/2003</u> . | 6) <input type="checkbox"/> Other: ____. |

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DETAILED ACTION

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Raboin et al. (USPN 6,547,189; hereinafter Raboin) in view of Taylor (USPN 6,439,508).

Regarding claims 1, and 17-19 Raboin discloses a modular human habitat system comprising: a housing having a rigid wall defining an internal volume 100, a longitudinal axis, first and second opening 106 being opposed along the longitudinal axis (Col. 6, lines 55-66; Col. 10, lines 24-29), an external surface, and the rigid wall having an interior surface of generally the shape of a deployed inflatable shell 200, and the internal volume being substantially that of a deployed inflatable modular human habitat volume; a first distal enclosure having a first and second end 106 being opposed along a longitudinal axis, a first aperture on the first end and a second aperture on the second end forming a passage therethrough, and the first distal enclosure is connected to the housing such that the passage aligns with the first opening of the housing thereby providing access to the internal volume (See Fig. 1); and a second distal enclosure having a first end and a second end being opposed along a longitudinal axis, a hollow interior, and a first

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opening on the first end and the second distal enclosure being connected to the housing such that a passageway is formed between the hollow interior and the internal volume. See Col. 21, lines 2-18; Fig. 1. Raboin discloses all of the claimed subject matter with the exception of explicitly disclosing that the modular human habitat system is a simulator. However, Taylor teaches that it is well known to fabricate a human habitat system in a prototype design and in order to provide testing in a simulated environment (Col. 6, lines 34-38). Thus, in view of Taylor, it would have been obvious to one of ordinary skill in the art to modify the human habitat system described in Raboin, by testing the system in a simulated environment, in order to discover necessary modifications before actual deployment.

Regarding claim 2, Raboin discloses a modular human habitat system further comprising at least one longeron fixedly attached to, and extending from, the first distal enclosure through the internal volume and fixedly attached to the second distal enclosure. Col. 6, lines 55-65.

Regarding claim 3, Raboin discloses a modular human habitat system further comprising at least one window extending through the rigid wall into the internal volume. See Col. 26, lines 55-65.

Regarding claim 4, Raboin discloses a modular human habitat system further comprising an opening on the second end of through the second distal enclosure thereby forming a passage to the internal volume. See Col. 28, lines 34-43.

Regarding claim 5, Raboin discloses a modular human habitat system further including a portion of a simulated debris shield fixedly attached to the external surface. Col. 24, line 66 – Col. 25, line 10.

Regarding claim 6, Raboin discloses a modular human habitat system further including a plurality of simulated water bags fixedly attached to the interior surface. See Col. 7, lines 38-56.

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Regarding claim 7, Raboin discloses a modular human habitat system further comprising; a floor structure; means for supporting the floor structure; and the floor structure extending substantially the length of the longitudinal axis and substantially dividing the internal volume into an upper internal space and a lower internal space. Col. 9, lines 1-63.

Regarding claim 8, Raboin discloses a modular human habitat system further comprising at least one access opening 104 in the floor structure. See Fig. 9.

Regarding claim 9, Raboin discloses a modular human habitat system further comprising; a plurality of floor structures; means for supporting the plurality of floor structure; and the plurality of floor structures extending substantially the length of the longitudinal axis and substantially dividing the internal volume into a plurality of internal spaces. See Col. 9, lines 1-63; Figs. 8-9.

Regarding claim 10, Raboin discloses a modular human habitat system further comprising at least one access opening 104 in at least one floor structure. See Fig. 9.

Regarding claim 11, Raboin discloses a modular human habitat system further including a plurality of cylinders disposed within, and fixedly attached to, the first distal enclosure. Col. 20, lines 51-65; Col. 6, lines 55-65.

Regarding claim 12, Raboin discloses a modular human habitat system further including a plurality of cylinders disposed within, and fixedly attached to, the second distal enclosure. Col. 20, lines 51-65; Col. 6, lines 55-65.

Regarding claim 13, Raboin discloses a modular human habitat system further including a plurality of cylinders disposed along, and fixedly attached to, the external surface of the first distal enclosure. Col. 6, lines 55-65; Col. 20, lines 51-65.

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Regarding claim 14, Raboin discloses a modular human habitat system further including a plurality of cylinders disposed along, and fixedly attached to, the external surface of the second distal enclosure. Col. 6, lines 55-65; Col. 20, lines 51-65.

Regarding claim 15, Raboin discloses a modular human habitat system further including a plurality of simulated panels fixedly attached to the interior surface. See Fig. 1.


Regarding claim 16, Raboin discloses a modular human habitat system further including a plurality of cylinders fixedly attached to the interior surface. Col. 6, lines 55-65; Col. 20, lines 51-65.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cameron Saadat whose telephone number is (571) 272-4443. The examiner can normally be reached on M-F 9:00 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Olszewski can be reached on (571)272-6788. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Cameron Saadat
May 1, 2006


JOHN M. NOTALING, II
PRIMARY EXAMINER